UNITED STATES PATENT AND TRADEMARK OFFICE

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10/646,575	08/21/2003	Winnie C. Wu	MSFT-2733/305587.01	9794

				EXAMINER
41505	7590	12/08/2006		ABEL JALIL, NEVEEN

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2165	

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Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *9/21/2006*.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

Remarks

1.   The Amendment filed on September 21, 2006 has been received and entered. Claims 1-16 are pending.

2.   Applicant's Amendment has overcome the previous claim objections and <u>some</u> of the 112, second rejections.

Claim Objections

3.   Claims 7-10, and 15 are objected to because of the following informalities:

Claim 7 recite the limitation "the details" and "the query language" in line 4. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required

Claim 7, line 2, recite the limitaion "that enables" is indirect, suggest optionally, and passive which renders any recitation claimed after not be given patentable weight. Appropriate correction is required.

The Examiner points to MPEP 2106 [III-C] wherein the claim's recitation of "enables" raises the question to Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation.

Office personnel must rely on the applicant's disclosure to properly determine the meaning of ** the claims. Limitations appearing in the specification but not recited in the claim are not read into the claim; therefore, in this case, the recitation of "enables" as interpreted in light of the specification provide the "functionality" or "the capability" of the database management system to perform the steps without definite disclosure limiting or excluding any alternative, negative, or even all together suggest actually performing or implementing the functionality that is database management system is capable of.

Therefore, any cited art that teaches the steps otherwise in the alternative can be used to reject the instant application. The computer being adapted to perform a function does not mean that it will ever actually perform that functionality (i.e. "enables" should be clarified and changed to a more definite term such as "causes").

Claim 8 preamble introduced the recitation "for providing an Application programming interface" without later introducing any steps/processes involved in achieving the actual "providing of an application programming interface". That recitation never takes place in the body of the claim raising the question to what is actually being claimed.

Claim 9 recite the "the form" in line 2. There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

Claim 10, line 1, recite "the generated classes" (plural) although the previous and first mention of such recitation was made in claim 9, line 3, in the singular form "generating a class".

Is the recitation meant to be in singular or plural or is it a new limitaion being introduced?

Clarification and correction are required.

Claim 15 recite the "the classes" in line 2. There is insufficient antecedent basis for this

limitation in the claim. Appropriate correction is required

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5.   Claim 13 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention. Since the claim does not distinct the preamble from the body of the claims.

The claim appears to be one long preamble (i.e. single narrative paragraph) without any

separation (i.e. semicolon) between it and the elements that make up the argued/ stated

"Application programming interface" as claimed. The examiner is thus still unclear on what is

the claimed invention.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1-3, 6-9, and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Call (U.S. Pub. No. 2002/0143521 A1) in view of Vincent, III (U.S. Pub. No.

2004/0268240 A1), and further in view of Lotter et al. (U.S. Pub. No. 2002/0184163 A1).

        As to claims 1, 8, and 13, Call discloses a storage platform comprising:

        a data store in which data stored therein is defined in terms of items, elements, and

relationships, wherein an item is a unit of data storable in the data store and comprises one or

more elements, an element is an instance of a type comprising one or more fields (See Call page

5, paragraph 0065, also see Call page 11, paragraphs 0115-0117, also see Call page 18,

paragraph 0275), and

        a relationship is a link between at least two items (See Call page 26, column 1, lines 29-

37);

        a set of schemas that define different types of items, elements, and relationships (See Call

page 11, paragraphs 0115-0117); and

        an application programming interface comprising a class for each of the different items,

elements, and relationships defined in the set of schemas (See Call page 25, paragraphs 0376-

0375, also see Call page 5, paragraph 0070).

        Call does not teach a customizable subset of schemas that extend the set of schemas and

are dependent on the set of schemas.

        Vincent, III teaches a customizable subset of schemas that extend the set of schemas and

are dependent on the set of schemas (See Vincent, III page 7, paragraphs 0100-0112, and see

Vincent, III page 8, paragraph 0115).

It would have been obvious to a person having ordinary skill in the art at the time of the

invention was made to have modified Call by the teaching of Vincent, III to include a

customizable subset of schemas that extend the set of schemas and are dependent on the set of

schemas because it allows for large scale schema management and consistency (See Vincent, III

page 1, paragraphs 0003-0004).

Call as modified still does not teach a synchronization service that synchronizes the

storage platform with another storage platform and synchronize the data store with data sources

that implement proprietary protocols.

Lotter et al. teaches a synchronization service that synchronizes the storage platform with

another storage platform and synchronize the data store with data sources that implement

proprietary protocols (See Lotter et al. Figure 24, and see Lotter et al. page 6, paragraph 0069,

lines 9-16, also see Lotter et al. page 7, paragraph 0071, lines 17-22, wherein any internal

company communication protocol is deemed to be proprietary).

It would have been obvious to a person having ordinary skill in the art at the time of the

invention was made to have further modified Call as modified by the teaching of Lotter et al. to

include a synchronization service that synchronizes the storage platform with another storage

platform and synchronize the data store with data sources that implement proprietary protocols

because it allows for access standardization across shared data platform (See Lotter et al. al. page

6, paragraph 0068).

As to claims 2, 9, and 14, Call as modified discloses wherein data is stored in the data

store in the form of an extension to an existing item type, and wherein the application

programming interface comprises a class for each different item extension (See Call page 26,

column 2, lines 1-17).

As to claim 3, Call as modified discloses wherein the class for each type of item, element,

and relationship is generated automatically based on the set of schemas that define each type of

item, element, and relationship (See Call page 25, paragraph 0374, also see Call pages 11-12,

paragraph 0125).

As to claims 6, and 12, Call as modified discloses comprising a database engine on which

the data store is implemented, and wherein the different types of items, elements, and

relationships in the data store are implemented in the database engine as user-defined types

(UDT) (See Call pages 11-12, paragraphs 0125-0128).

As to claim 7, Call as modified discloses wherein the application programming interface

provides a query model that enables application programmers to form queries based on various

properties of the items in the data store, in a manner that insulates the application programmer

from the details of the query language of the database engine (See Call page 11, paragraphs

0120-0124, also see Call page 5, paragraphs 0070-0071).

8.   Claims 4-5, 10-11, and 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable

over Call (U.S. Pub. No. 2002/0143521 A1) in view of Vincent, III (U.S. Pub. No.

2004/0268240 A1), and further in view of Lotter et al. (U.S. Pub. No. 2002/0184163 A1) as

applied to claims 1-3, 6-9, and 12-14 above, and further in view of Freyssinet et al. (U.S. Patent
No. 6,477,564 B1).

As to claims 4, 10, and 15, Call as modified still does not teach wherein the classes for
each type of item, element, and relationship define a set of data classes, and wherein the
application programming interface further comprises a second set of classes that define a
common set of behaviors for the data classes.

Freyssinet et al. teaches wherein the classes for each type of item, element, and
relationship define a set of data classes, and wherein the application programming interface
further comprises a second set of classes that define a common set of behaviors for the data
classes (See Freyssinet et al. column 6, lines 31-46, also see Freyssinet et al. column 5, lines 28-
53).

It would have been obvious to a person having ordinary skill in the art at the time of the
invention was made to have further modified Call as modified by the teaching of Freyssinet et al.
to include the classes for each type of item, element, and relationship define a set of data classes,
and wherein the application programming interface further comprises a second set of classes that
define a common set of behaviors for the data classes because it allows for ease of data
integration and assists in decision making process (See Freyssinet et al. column 1, lines 23-40).

As to claims 5, 11, and 16, Call as modified discloses wherein the second set of classes
comprise a first class that represents a storage platform scope and that provides a context for

queries on the data store and a second class that represents the results of a query on the data store

(See Call page 21, paragraphs 0321-0322, also see Freyssinet et al. column 5, lines 20-50).

Response to Arguments

9.   Applicant's arguments filed on September 21, 2006 have been fully considered but they

are not persuasive.

In response to applicant's argument that "rejection under 112, second paragraph

pertaining to claim 13 should be withdrawn" is acknowledge but not deemed to be persuasive.

The rejection is maintained because there are no separators (i.e. semicolon) to distinguish

the components of the claimed provided "application interface". The entire claim appears to be

one long paragraph. Correction is required.

In response to applicant's argument that "the independent claims include the feature of

synchronizing the storage platform with another storage platform and synchronizing the data

store with the data sources that implement proprietary protocols" is acknowledge but not deemed

to be persuasive.

It is essential to note that there is neither an outcome nor functionality produced as a

result of the "synchronization" as provided in the claim.

Applicant's own disclosure provides for two aspects to the invention, as stated in

paragraph: [0798] According to another aspect of the present invention, the storage platform

provides a synchronization service 330 that (i) allows multiple instances of the storage platform

(each with its own data store 302) to synchronize parts of their content according to a flexible set of rules, and (ii) provides an infrastructure for third parties to synchronize the data store of the storage platform of the present invention with other data sources that implement proprietary protocols. And paragraph [0799] Storage platform-to-storage platform synchronization occurs among a group of participating replicas. For example, with reference to FIG. 3, it may be desirable to provide synchronization between the data store 302 of the storage platform 300 with another remote data store 338 under the control of another instance of the storage platform, perhaps running on a different computer system. The total membership of this group is not necessarily known to any given replica at any given time.

In light of the above paragraphs; <u>Lotter</u> in paragraph 0069, clearly teaches synchronization taking place between local platform and industry shared platform residing at a remote location. Thus, Lotter explicitly states a scheduled batch synchronization program typically compares data on company databases (deemed to be proprietary associated with local platform) with data on the industry platform databases and performs update operations to effect agreement between the company databases and the industry platform databases. There's no apparent distinction between Lotter and the argued limitation.

The only definition given in the specification as to proprietary protocol is found in applicant's specification paragraph 0798. Therefore, the argued limitaion can broadly be interpreted to read on the Lotter reference's local network running its own secure data. <u>Pcmag.com</u> provides the definition of: proprietary protocol to be:

A non-standard communications format and language owned by a single organization or individual. Thus, <u>Lotter</u> is broadly interpreted to read on the argued limitation.

In response to applicant's argument on page 8 that "that the claimed invention would not result from the combination because <u>Call</u> is directed to storing both fixed and variable length data as an addressable array of integer values organized to permit more efficient execution of processing, any synchronization would be performed on the fixed and variable length data itself; and not between storage platforms" is acknowledge but not deemed to be persuasive.

It is essential to note that the combination does not present apparent reason for failure.

However, if <u>Call</u> were taken alone under the argued discussion; then, <u>Call</u> would be sufficient to meet one definition of "synchronization" covered by applicant's specification paragraph 0798 where Applicant's own disclosure appears to also equate platform to platform synchronization as occurring between multiple instances of the same storage platform. More so, the Examiner has explicitly introduced <u>Lotter</u> to teach "synchronization" between two separate entities as explained above.
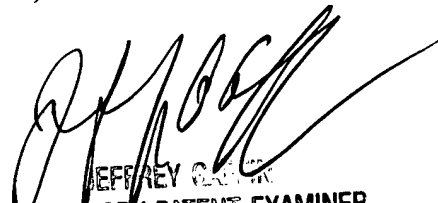
Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See List of Cited Reference PTO form 892.

11.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Neveen Abel-Jalil whose telephone number is 571-272-4074. The examiner can normally be reached on 8:30AM-5:30PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jeffrey A. Gaffin can be reached on 571-272-4146. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Neveen Abel-Jalil
December 6, 2006

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